

WHAT IS CLAIMED IS:

1. A high-voltage transformer for lighting a plurality of discharge lamps, said high-voltage transformer comprising a primary coil for inputting an AC voltage and a secondary coil for outputting a predetermined AC voltage higher than said AC voltage inputted,

wherein said primary coil comprises a starter primary winding for initially lighting said discharge lamps, and a normal lighting primary winding for normally lighting said discharge lamps.

2. A high-voltage transformer according to claim 1, wherein said starter primary winding is comprised by a part of said normal lighting primary winding by providing a tap in said normal lighting primary winding.

3. A high-voltage transformer according to claim 1, wherein said starter primary winding is provided independently from said normal lighting primary winding so as to have a diameter smaller than that of said normal lighting primary winding.

4. A high-voltage transformer according to claim 1, wherein said starter primary winding has a smaller number of turns than that of said normal lighting primary winding.

5. A high-voltage transformer according to claim 1, wherein said high-voltage transformer is an inverter transformer.

6. A high-voltage transformer according to claim 1, wherein said discharge lamp is a cold cathode fluorescent lamp.

7. A discharge lamp driving apparatus comprising the high-voltage transformer according to claim 1, said apparatus further comprising:

first switching means for controlling an energizing state of said starter primary winding; and

second switching means for controlling an energizing state of said normal lighting primary winding.

8. A discharge lamp driving apparatus according to claim 7, wherein a

switching frequency for driving said first switching means and a switching frequency for driving said second switching means are switchable therebetween.

9. A discharge lamp driving apparatus according to claim 7, wherein said first and/or second switching means is a full-bridge circuit.

10. A discharge lamp driving apparatus according to claim 7, wherein said first and second switching means are partly used in common.

11. A discharge lamp driving apparatus according to claim 7, wherein said first switching means energizes said starter primary winding for a predetermined time, and then said second switching means energizes said normal lighting primary winding.